**Soil Testing Lab**

***Prelab***

Directions: Read the prelab and answer the following questions.

1. What four nutrients of soil should be tested to determine if your soil is fertile? (4 points)
2. For each of the nutrients above, why do you need to know the amount of each in the soil? (8 points)

***Lab Procedure***

1. Read the procedure for testing each of the four components of soil.
2. Pick three different soils from our collection of soils to test.
3. Test the three soil samples for each of the soil components.
4. Fill in the table below with your results.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Soil Sample** | **Nitrogen** | **Potassium** | **Phosphorus** | **pH** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

***Analysis***

Directions: Use the data you collected for each of your soil samples to answer the following questions.

1. Which soil do you believe is the most fertile? Why? (3 points)
2. What type of soil is each of the ones you picked? How do you know this? (3 points)
3. Look at the first soil you tested. You want to start a vegetable stand and plan to plant sweet corn in this soil. What will you have to do to prepare this soil for your sweet corn? Be specific with what needs to be added and/or changed about the soil. (8 points)
4. Why would you add and/or change the things you mentioned in number 3? How would these things help you business? (8 points)
5. Would you rather plant your sweet corn for your vegetable stand in one of your other two soils? Why or why not? (Remember you are trying to make money and the more you add to/change the soil, the more is costs you!) (4 points)